

CLAIMS

1. A method for decoupling a Mobile IP home network from its Mobile IP Home Agent with support for roaming on the intranet as well as the Internet, characterized in that the normal operation of the IGP is assumed, and that a static route for a Mobile Address aggregate is used to distribute Mobile IP addresses in the IGP.
2. A method according to claim 1, characterized in that the IGP is used for directing traffic to the HA for Mobile Clients that are roaming outside their Mobile Home Network.
3. A method according to claim 1, characterized in that the proxy ARP function of the default gateway is used for directing traffic in the Mobile Home Network to the HA for the Mobile Clients that are roaming outside their Mobile Home Network.
4. A method according to claim 1, characterized in that the Mobile IP registrations are redistributed to the IGP in order to direct traffic to the HA for the Mobile Clients that are roaming outside their Mobile Home Network.
5. A method according to claim 4, characterized in that the traffic is directed toward the HA instead of the Mobile Address aggregate using host routes.
6. A method according to claim 1, characterized in that the Mobile IP registrations are redistributed to the IGP in order to direct traffic to the HA.
7. A method according to claim 1, characterized in that the Mobile Client deregisters over several IP router hops to the Mobile IP Home Agent
8. A method according to claim 7, characterized in that the Mobile Home Agent verifies that the Client is located in the Mobile Home Network by the source address of the Mobile IP registration request.

9. A method according to claim 7, characterized in that the Mobile client detects that it is in the Mobile Home Network by using DHCP options and IRDP Router Advertisements.

10. A method according to claim 1, characterized in that the Home Agent
5 utilizes an IGP route injector and MAC layer redirect per physical interface for shared deployment scenarios where an address overlap between the physical networks hosting the virtual home networks may exist.

11. A method according to claim 10, characterized in that the Home Agent in its home session table keep track of the interface and gateway MAC
10 address over which the registration from the Mobile Node came in order to allow for overlapping care-of-addresses at visited networks.